



U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy

Joint Office Priorities for Diversity, Equity, Inclusion, and Energy and Environmental Justice

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Diversity, Equity, and Inclusion (DEI)

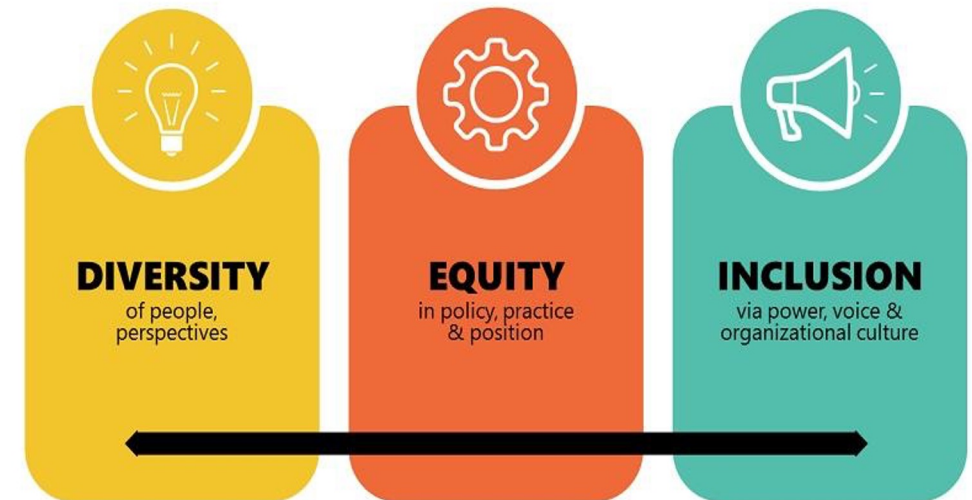
- **Diversity** includes characteristics including, but not limited to, race, color, ethnicity, national origin, age, religion, culture, language, disability, sexual orientation, gender identity, socioeconomic status, family structure, geographic differences, diversity of thought, technical expertise, and life experiences.
- **Equity** is the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment.
- **Inclusion** is a process that cultivates a work environment that encourages collaboration, flexibility, and fairness; and leverages diversity so that all individuals are enabled to participate and contribute to their full potential.

Women, persons with disabilities, and underrepresented minority groups are vastly underrepresented in STEM.

For example:

- 24% of US workforce = underrepresented groups
- 9% of STEM workforce = underrepresented groups

In STEM, women are paid on average, **17.8% less** than men, and underrepresented minorities are paid **13.3% less** than white workers. In 2017!



Why Energy and Environmental Justice at EERE?



INEQUITABLE IMPACTS

- 1930s & 1940's discriminatory redlining practices generated **disproportionate environmental burdens** causing **negative long term health impacts to present day**
- **Current day** manufacturing and waste management, including plastic waste and repurposed oil/gas refineries disproportionately lead to affect poor and communities of color, leading to negative long term health impacts



SCIENTIFIC IMPERATIVE

- Science improves with **diverse teams and approaches**
- Reviewers are more likely to choose similar gender and nationality characteristics in their selections
- Teams with greater ethnic diversity generate papers that get more visibility in scientific literature
- Transparency about benefits AND risks/downsides to communities improves likelihood of project success

EXECUTIVE ORDERS (EO)



EO13985: Equity in Programming

EO14008: Climate home and abroad (J40)

EO14091: Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

Environmental Justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. **Energy Justice**: social and economic participation in energy system

Approach: Plan for Equity in New Clean Energy Technology Development



EERE EEEJ GOALS

Advance energy democracy, alleviate energy insecurity, lower energy costs, and expand access to and ownership of clean energy assets for the broadest set of Americans. Through the EERE Mission, we:

- Provide equitable research, development, demonstration, and deployment funding and project opportunities
- Increase collaborations with disadvantaged and energy transition communities, a diverse set of academic institutions, and wide range of energy system stakeholders.



GUIDING PRINCIPLES

Programmatic Leadership

Integrate equity within congressional intent of technology programs

Central Coordination

Leverage programmatic experience through sharing and learning

Crosscutting Programming

Develop technology neutral RDD&D programs targeting community needs

DEI and EJ in BETO Funding Solicitations

Many projects reviewed started before the DEI plan requirement

New requirement for all EERE-funded projects to include plan to address DEI/EEJ in 2021

2020

No requirement to address DEI/EEJ in BETO-funded projects

2021

- DEI plans introduced. 10% of application score. DEI observers invited to review meetings.
- DEI on project, support disadvantaged communities

2022

- DEI plans updated. 10% of application score.
- Include equity impacts, benefits to underserved communities, and DEI incorporation

2023

- Community Benefits Plan introduced. 15% of application score.
- Advance DEI, energy equity, workforce development. Concrete examples included in FOA

2024 and beyond

- More resources for applicants and reviewers
- Likely evolving language
- Tracking impacts of work funded 2021 and after

EERE Energy and Environmental Justice Accomplishments

Process Improvements

- FOA DEI Language, training
- Improved Data collection
- Expanded eligible reviewer expertise
- Program policy factor to support EO 14008

Structural Improvements

- EERE Mission update
- Measurement of programs against J40 baseline
- Synthesized community feedback across EERE programs
- Inclusion of DEI into staff performance

Questions for reviewers:

- ☐ How is EJ relevant to the portfolio/project?
- ☐ How well is the project addressing EJ impacts?
- ☐ Is there proactive work to address DEI?
- ☐ What should BETO be doing better/differently to reflect DEI/EJ needs?

BETO Highlights



MSI STEM
Research & Development
CONSORTIUM

MSRDC solicitations in 2022
\$2,380,000 awarded to MSIs as leads

2022 Conversion FOA- Increased MSI participation,
2 HBCUs out of 11 selected projects

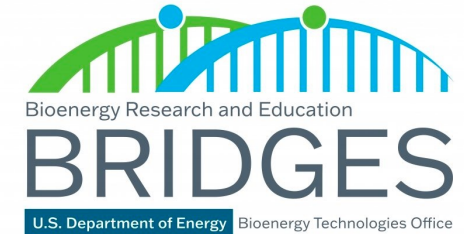
SBIR Community partnering
topics for BETO and EERE

Efforts to make it easier
to apply to BETO FOAs

FY23 Conversion R&D FOA teaming
list -**41 teams responded** so far

FY22 Community-scale Waste FOA
awardees- **4 new projects** selected
to support communities directly

Creation of a equitable siting tool
factoring in environmental justice
indicator data (PM2.5, VOCs, etc.)



ATEC reached 179,000
students. 19 MSI partners

Waste to Energy for Local
Governments Technical
Assistance Program: **32
communities and counting**

Supported two regional equity
analyses: I-WEST and Appalachia



Questions?



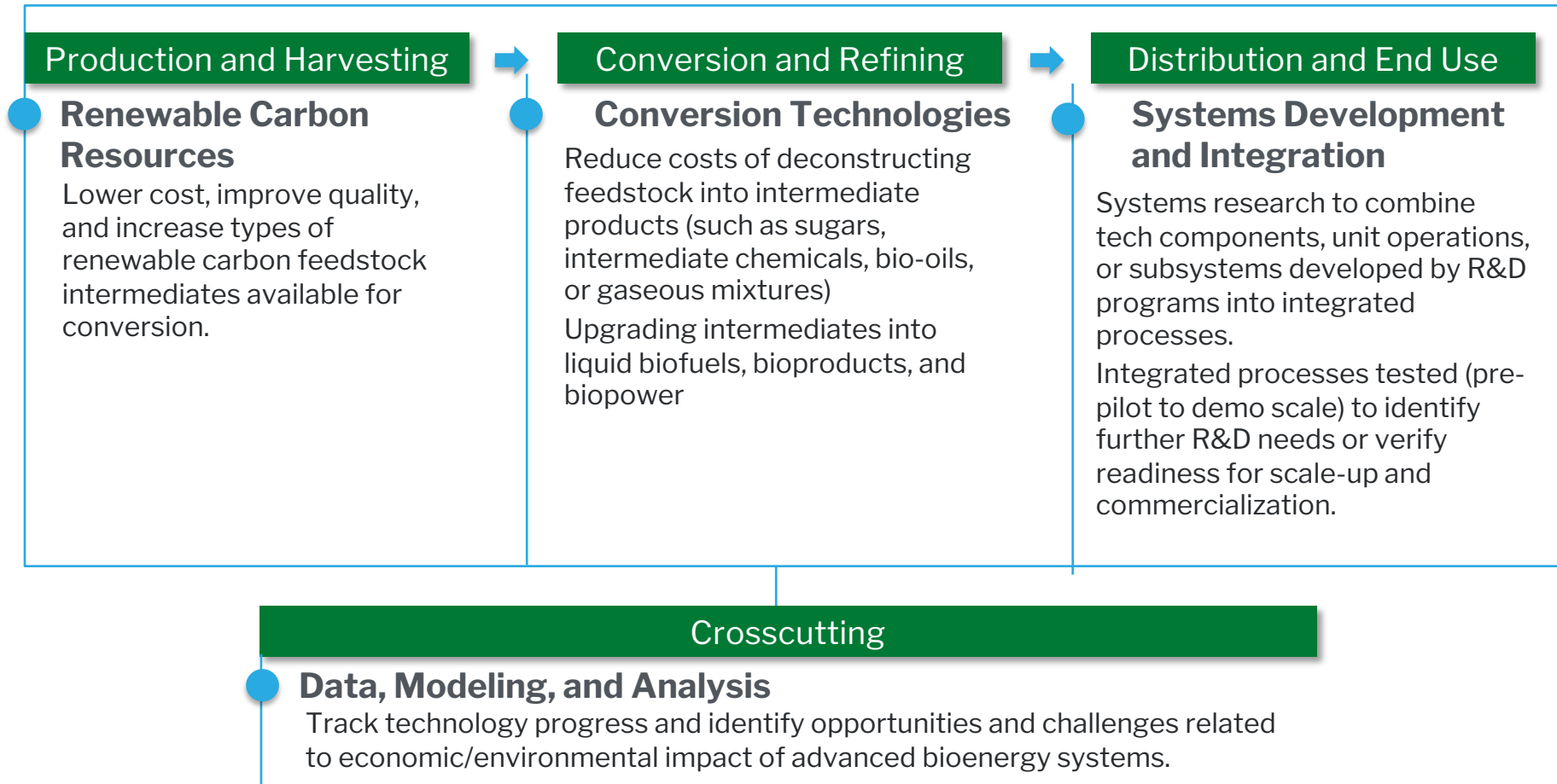
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BETO Critical Program Areas and EJ



Justice acronyms, definitions, and resources

- Justice, Equity, Diversity, and Inclusion - JEDI
- Climate Justice
 - Remediation of the impacts of climate change on poor people and people of color, and compensation for harms suffered by such communities due to climate change (from Burkett 2008, NREL's presentation to EERE)
- Environmental justice:
 - “the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” ([EPA](#))
- Energy justice
 - “the goal of achieving equity in both the social and economic participation in the energy system, while also remediating social, economic, and health burdens on those disproportionately harmed by the energy system” (Initiative for Energy Justice [[IEJ USA](#)])
- DOE's Energy Justice Dashboard beta website is [live](#)

Ongoing activities

- [DOE Barriers to Funding RFI](#)
- Office of Strategic Analysis' EEEJ Analytical Roadmap
- Workforce Development
- External stakeholder outreach
- R&D portfolio
 - Joint Office Priorities Team – BETO Team for DEI Implementation for FY21 FOA, FY22 FOA, and FY23 FOAs. Reviewer recruitment, training resources, evaluation and selection resources
 - EERE DEI Working Group
 - Appalachia Tiger Team , EJ Tiger Team
 - Waste-to-Energy funding opportunity topics
 - FY21 AOP Crosscut



DOE Justice40 Policy Priorities

- (1) Decrease **energy burden** in Disadvantaged communities (DACs).
- (2) Decrease **environmental exposure and burdens** for DACs
- (3) Increase **parity in clean energy technology** (e.g., solar, storage) **access and adoption** in DACs.
- (4) Increase **access to low-cost capital** in DACs.
- (5) Increase **clean energy enterprise creation** (MBE/DBE) in DACs.
- (6) Increase the **clean energy job pipeline and job training** for individuals from DACs.
- (7) Increase **energy resiliency** in DACs.
- (8) Increase **energy democracy** in DACs.

Department of Energy Environmental Justice Illustrated

Procedural justice and meaningful participation in decision making.

Solicit stakeholder input to inform project design and create meaningful opportunities for routine stakeholder engagement throughout the project lifecycle.

Distributive justice and ensuring the benefits and burdens of DOE-funded projects are equitably distributed.

Develop a community benefits plan, in partnership with community stakeholders, that describes in detail how the project will deliver tangible benefits to communities throughout the project lifecycle.

Recognition justice and understanding the history and context of DOE-funded project development.

Conduct a baseline analysis of existing environmental burdens, hazards, and harms within the proposed project area and determine whether the proposed project would create additional social or environmental impacts within the local community such that the project location, size, or scale should be reconsidered.

Restorative justice and facilitating healing and harmony through DOE-funded activity.

Create opportunities to improve environmental and social conditions within communities, including job and enterprise creation, as well as remediation of legacy pollution.

*Excerpt from DOE ED's Justice40 Initiative Environmental Justice Fact Sheet